

Hampton Seabrook Estuary Collaborative: Working Webinars

Collaborating on Solutions

Thursday, March 18, 1:00 pm, 2021

2/11: Getting on the Same Page

- Welcome & Introductions
- Overview of HSE system
- Why focus on salt marshes?
- Management goals for marshes
- Related research questions
- Related science & Monitoring
- Discussion of gaps

3/4: Digging In

- Welcome, housekeeping
- Lightening presentations on work related to gaps
- Generating ideas to address the gaps

3/18: Collaborating on Solutions

- Idea presentations
- Idea refinement (breakouts & report out to big group)
- Recruitment: who wants to work together to advance what ideas?
- Wrap up
- Exit survey

Series Overview

[Collaborating on Solutions recording available here: presentations & coffee chat](#)

Collaboration on Solutions Presentations & PowerPoints		
Presenter	Presentation	Time Stamp
Kevin Lucey, NHDES	Marsh Condition	06:10
Chris Meaney, USF&W	Salt Marsh Sparrow Conservation	33:20
Rayann Dionne, SHEA & Trevor Mattera, PREP	Marsh Conservation & Migration	1:05:34
Coffee Chat		1:32:09

Notes

Marsh Condition: Data Needs—Vegetation, Sediment, and Water Levels

How do we go about selecting transects in this Estuary?

- Rhode Island developed and implemented a rapid assessment protocol [RISMA](#)
 - Provides intermediate scale view - has been implemented throughout the state
 - Contacts: [Kenny Raposa](#), NBNERR; [Wenley Ferguson, Save The Bay](#)
 - [RISMA data sheet from 2017](#) is here just to give an idea of the things they assess.

How many monitoring locations would it take to give us meaningful vegetation data?

- Compare to Webhannet marsh transect designs
 - Originally, 8 transects across the entire estuary to answer questions of “How was adjacent land use affecting the marsh.” If more interested in SLR impacts, that design no longer works.
 - Now they have pivoted to smaller, more discreet sections, similar to Great Bay.
 - Pros and cons to both designs
- SHEA emphasizes ecotones are important. Has technical assistance grant to fund high school students to do citizen science picture posts. Basically to field verify SLAMM models. Unable to complete due to COVID, but hoping to rekindle. Could coordinate w/[Kevin Lucey](#).
- Build analysis into the vegetation monitoring! [Cory Riley](#)

Possible opportunity for picture post project coordination between [Alyson Eberhardt](#), [Rachel Stevens](#), and [Rayann Dionne](#)

What are our sediment data needs?

- We should go on a field trip to see some TLD sites—important to understand some places could benefit from this, but it’s not a silver bullet or easy lift ([Susan Adamowicz](#))
- Understanding sediment budget is a need/idea with a lot of enthusiasm
- [Chris Peter](#): we may want to expand our SET replicates; we have 6 scattered throughout
- Cory: “the emphasis should be evaluating all possible options for maintaining marsh acreage, [even if it is not in the same place in the future.](#)”
- [Eric Hutchins](#): I often wonder how much lost sediment source exists when large storms can't blast over the dunes, but instead hit sea walls and other structures. *1 large storm coupled with a little sea level rise could be equal to 20 or possibly 200 TLP projects.*
 - [Dave Burdick](#) and [Diane Foster](#) have a project to look at this in NH - variation in wash over from dunes into marshes where there are roads vs. no roads.

Water level data needs

- Great Bay NERR is part of a regional NERR project looking to enhance water level monitoring with a series of instruments, some novel, some inexpensive (\$100-1000 per instrument). Starting next year and potentially this summer **we should have extra instruments that could be available for use at HSE** ([Chris Peter](#))

Avian Science & Conservation: Data Needs

- From Cory:

- 1) It would be great to have a list of tips for restoration practitioners to include ways to enhance saltmarsh sparrow habitat;
- 2) I think we need to link where we actually see sparrows breeding with the types of conditions we see there—to figure out what they are most sensitive to
- Need actual funding for field technicians. We have the expertise to supervise / protocols through USFWS, UNH and ASNH.
- Increase knowledge of important submarsh habitat to avoid conflicts.
- Cory Riley: Trying to do some work with the high resolution habitat data and some of the condition indicators to see if we can map areas the sparrows might like.
- “Identify fringe marsh as refuge” it would also be helpful to identify the future marsh migration areas (that may not be marsh today) but will be the high marsh locations of the future and may be worth protecting/conserving today.
 - The salt marsh plan that GBNERR and NHCP are working on this, but perhaps more detail is needed to understand specifically where salt marsh sparrow will be in the future
 - Trying to determine where these areas are and future restoration potential.
 - Relating existing sparrow locations to high resolution tidal wetland maps would give us restoration targets.

Question from Chris: What would be needed in addition to what we already have in order to advance i.e. additional capacity, data, funding, etc. Better understanding this will help frame recommendations and collaborative work into the future.

Responses:

- Elise: Good high resolution topographic data to identify areas where marsh could exist in the future in order to prioritize those areas.
- Cory: We’ve been working on the NH Salt Marsh Plan that looks at where marshes are migrating. Would be awesome to add salt marsh sparrows to the model.

What is the HSE’s ‘carrying capacity’ for salt marsh sparrows?

- They have a certain acreage they need, and certain habitats within that acreage.
- Will current carrying capacity be determined based on viable marsh habitat and potential carrying capacity with marsh restoration?
- Existing population of sparrows vs. the expected carrying capacity for NH? How are the sparrows doing in NH? We are planning to re-run SLAMM based on updated LiDAR and using the high resolution tidal wetland maps as the land cover (much finer resolution than traditional National Wetland Inventory)
- Salt marsh plan from GBNERR and NHCP is trying to identify those future high marsh areas, but perhaps more detail is needed to understand specifically where salt marsh sparrow will be in the future.
- What is the current population of sparrows in HSE now? Less than 500 salt marsh sparrows state-wide

- [Mitch](#) Hartley wanting to work with [Pam](#) Hunt and [Adrienne Kovach](#) to identify high-priority areas within an already defined priority subset

What is the level of local HSE public outreach underway about salt marsh sparrows?

- How much does the general public care about this species: voters might need to be convinced?
- NH Audubon published "State of the Birds" report and distribute to Conservation Commissions. Opportunity to leverage this
- We can focus our outreach on the broad benefits of their habitat and at the same time prioritize Saltmarsh Sparrow as key to the ecosystem.
- Public outreach is needed! Could get the public excited about conserving this species (and its habitats) before it's too late. Everybody would benefit from habitat doing well and we should emphasize that.
- People would possibly work harder to protect soft shell clams and winter flounder than the sparrows → But we can't ignore the economic impact of wildlife watching either. It's just a lot less obvious to your average HSE voter, and birders aren't traditionally a cohesive "political" force. (from Pam)

Is there an entity in NH focused on salt marsh sparrow management in HSE that is also incorporating future salt marsh mapping/sea level rise vulnerability? I know of disparate efforts to evaluate the habitat and the birds separately, but maybe not in such a coordinated way. Is that a need?

- [Rachel](#) Stevens: that's exactly what we are trying to do: coordinating with USFWS's regional plan for sparrows and our interest in marsh migration.
- DOT is planning to widen Route 1 to five lanes from three. Does anyone know what they are going to do where Route 1 crosses the marsh between Hampton and Hampton Falls?

Marsh Migration

How do we move the needle on conservation?

- Updated SLAMM analysis may be a place to re-evaluate
- Previous analysis based on Coastal Viewer layers to find parcels of interest, and compared to town tax maps/GIS
 - Predicted marsh migration, land conservation plan, and salt marsh restoration opportunities
 - Need for additional evaluation -- zoning? Add another layer of prioritizing, not just identifying.
 - [Kevin Lucey](#): interesting to think about metrics for prioritization. SW corner could be interesting.
- Possible to go back to this analysis and separate how much is salt marsh today vs. potential migration space (though in some cases potential migration space would be rough estimate)
 - Buying marsh is a very different process from buying migration space!
- Very high percentage of habitat restoration in NE is driven by something being broken or expensive
 - Think about finding net gain, be opportunistic and look for best opportunities to buy not always best parcels to buy (that are years-long fights to acquire)

BUT who do we want to own the marsh?

- Possible effort to get town to put municipally owned (but not conserved) parcels under conservation easements
- Potential controversy -- strong reactions from the community about this?
 - SHAE will check-in with town CCs, but no flags thrown to date
 - [Trevor Mattera's](#) perspective -- not so controversial for CCs, similar analysis in Exeter
 - [From Eric Hutchins](#): "The topic of purchasing coastal land might be controversial, but likely few people refute the need. One approach...do reverse bidding. Let people offer what they would sell their land for. Keep it market driven. Anyone who is not interested does not have to participate."
 - [Jay Diener](#) -- not talking about takings, talking about offer to purchase undeveloped land, or conservation easements on portions of property.
- [Rachel Rouillard](#) -- can we loop land trusts into this planning? SELT? Leverage existing relationships, strategies, and capacities they may have
 - Great Bay Resource Protection Partnership Meeting -- this would be great discussion topic for them
 - Opportunity for creative re-structuring of pots of funding from state and federal level. Broader topic! Freshwater flooding relevance.
 - Difficult to get land trusts interested in very small parcels

Coffee Chat

- Additional resources for monitoring through state? Through PREP?
 - What do we do first? How do we start?
 - Start by writing down what the estuary needs and this is where we're currently at. This could be turned into a work plan for funding and this is where people webinar could be involved again.
- Could be valuable to do an assessment of the interface and identify what where the hardening is going to be proposed i.e. the bridge expansion, where is the nuclear power plant, where is the wastewater treatment plant
 - DES being pretty firm about saying no to hardening where no hardening currently exists
 - [Sue A](#): Saltmarsh needs a lot of work. "Either a slight touch to avoid a tipping point or more involved measures to bring a location back from the brink. The trick in prioritizing including the factors being discussed." Don't want to spend a bunch of money restoring an area that will be absorbed by a highway expansion. Saltmarsh Sparrow drives a lot of our priority metrics.
- [Rayann Dionne](#) asked [Pam](#) Hunt: Is Audobon still interested in buying or holding conservation easements or land? Pam is unsure and would ask Phil Brown (pbrown@nhaudubon.org)
 - Wondering if Great Bay Resource Protection Department is still acquiring land around Great Bay and is anybody doing this in the HSE? → Pam thinks that they expanded but isn't sure.
- Rayann: Coastal viewer is really helpful for towns, because it puts information together in one place.

- Could we add bird nesting locations (in a general way) to the coastal viewer?
- Pam: we do have mid-granularity data like this and could do it. Gives an idea of sparrow density. Could be presented in categories (SHARP, Audubon, maybe UNH).
- [Mitch Hartley](#): SHARP data is already available online on [ACJV.org](#)
 - Very crude sparrow habitat prioritization tools, incomplete data in HSE; data is older. Looking to re-do those surveys this and next year (hopefully in NH too!)
 - Always possible that there's more data that's not in SHARP
 - Data can be played with to extrapolate and create a tool (working with older data etc.)
 - More money needed for more complete data (approx. \$15,000 needed for this work)